



## Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

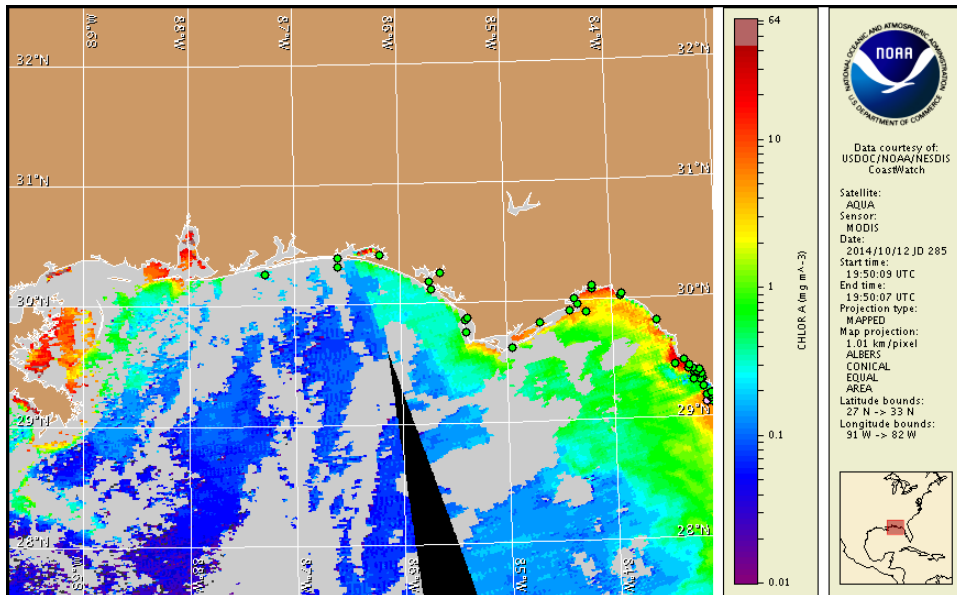
Tuesday, 14 October 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Thursday, October 9, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 5 to 9: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

[http://tidesandcurrents.noaa.gov/hab/habfs\\_bulletin\\_guide.pdf](http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf)

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

## Conditions Report

Not present to very low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest and southwest Florida from Bay to Levy counties. No respiratory irritation is expected alongshore northwest Florida Tuesday, October 14 through Thursday, October 16.

Check [http://tidesandcurrents.noaa.gov/hab/beach\\_conditions.html](http://tidesandcurrents.noaa.gov/hab/beach_conditions.html) for recent, local observations.

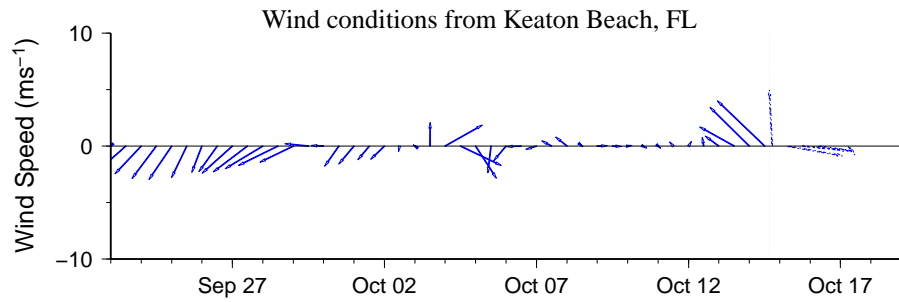
## Analysis

Recent samples collected this week along- and offshore northwest Florida (Escambia to Taylor counties) indicated not present to background concentrations of *Karenia brevis*. Samples collected within St. Andrew Bay in Bay County, continue to indicate that *K. brevis* is not present with the exception of one sample collected north of Cedar Point where background concentrations were identified (FWRI; 10/9-10/10). All other sampling along- and offshore and within the bay regions of Escambia, Gulf, and Wakulla counties this week indicated *K. brevis* was not present (FWRI; 10/7-10/10). No respiratory irritation associated with *K. brevis* has been reported along the coast of northwest Florida (MML; 10/9-10/14). Reports of dead fish have been received from alongshore Franklin County over the past several days (MML; 10/10-10/14).

In MODIS Aqua imagery from 10/12 (shown left) and 10/11 (not shown), patches of elevated to very high chlorophyll (2 to >20  $\mu\text{g/L}$ ) are visible along- and offshore portions of Bay and Taylor counties. Patches of elevated to high chlorophyll (2-12  $\mu\text{g/L}$ ) are visible along- and offshore northwest Florida from Gulf to Wakulla counties. A patch of anomalously high chlorophyll (6-11  $\mu\text{g/L}$ ) has become visible 18-45 miles offshore Taylor and Wakulla counties in MODIS Aqua imagery from 10/8 through 10/12. Due to the optical characteristics that are typical in the area, elevated chlorophyll is not necessarily indicative of the presence of *K. brevis*, and some elevated chlorophyll may also be due to the resuspension of benthic chlorophyll and sediments along the coast.

South to east winds over the past several days may have promoted northerly transport of *K. brevis* concentrations. West to northwest winds forecasted tonight through Thursday may promote southerly transport of *K. brevis* concentrations.

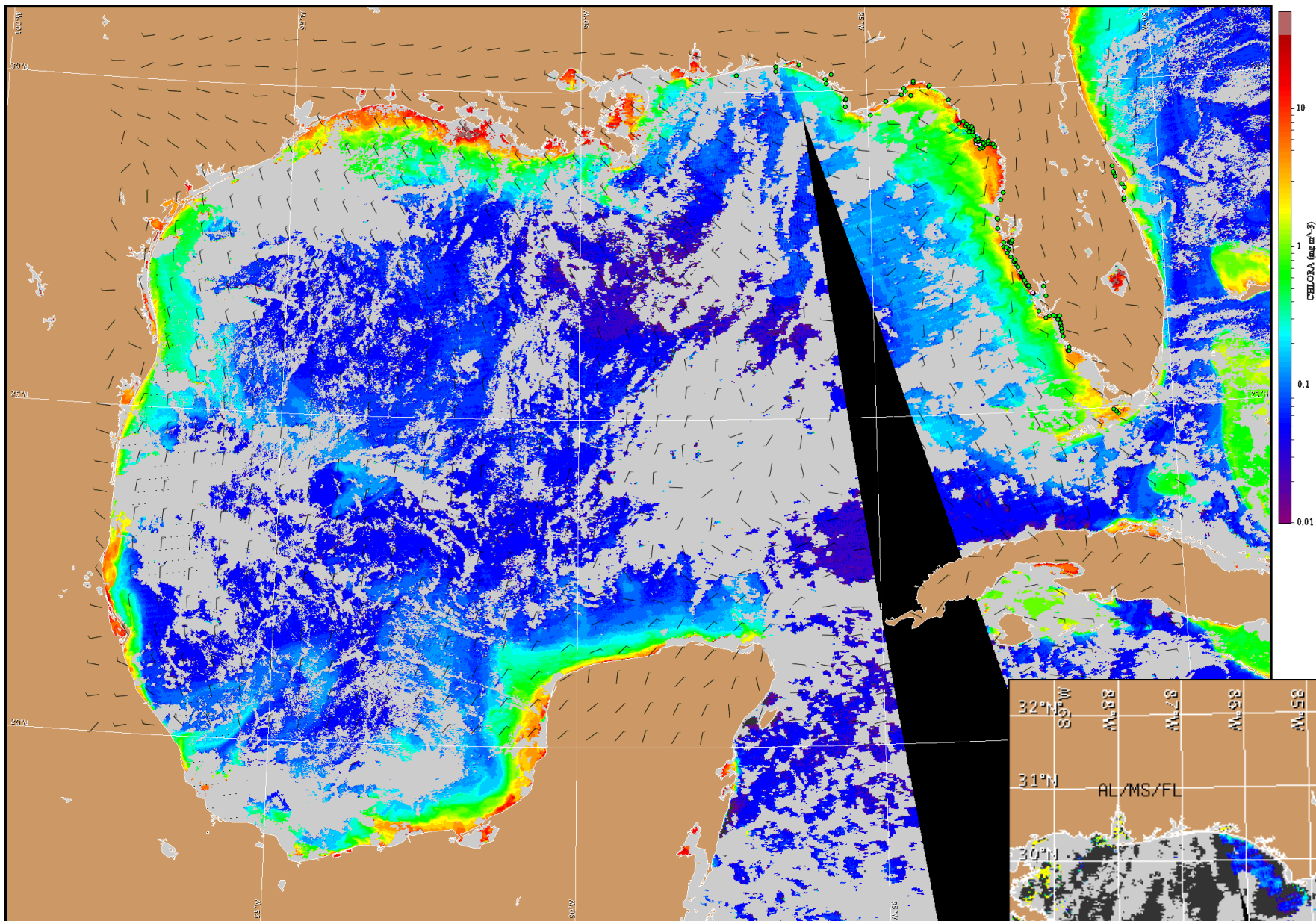
Davis, Urizar



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

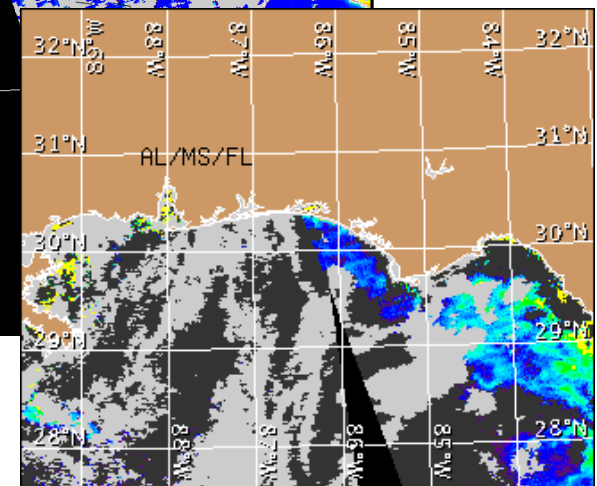
## Wind Analysis

**Escambia to Taylor counties:** South winds (20-25kn, 10-13m/s) today becoming west to southwest winds (10-20kn, 5-10m/s) this afternoon before turning northwest tonight. West to northwest winds (5-15kn, 3-8m/s) Wednesday and Thursday.



Satellite chlorophyll image and forecast winds for October 15, 2014 06Z with points representing cell concentration sampling data from October 5 to 9: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).